

## DOCUMENT RESUME

ED 163 236

08

CE 018 908

AUTHOR McClurg, Ronald B.  
TITLE Common Intra-Cluster Competencies Needed in Selected Occupational Clusters. Final Report. Supplemental Volume IX: Medical Lab Assistant.  
INSTITUTION Des Moines Area Community Coll., Ankeny, Iowa.  
SPONS AGENCY Bureau of Occupational and Adult Education (DHEW/OE), Washington, D.C.  
BUREAU NO 409AH60116  
PUB DATE May 78  
GRANT G007603320  
NOTE 53p.; Not available in hard copy due to reproducibility problems. For related documents see CE 018 899-916

EDRS PRICE MF-\$0.83 Plus Postage. HC Not Available from EDRS.  
DESCRIPTORS Cluster Grouping; \*Data Analysis; \*Health Occupations; \*Job Analysis; \*Job Skills; \*Medical Laboratory Assistants; Occupational Clusters; \*Task Analysis

## ABSTRACT

An analysis of survey responses from a sample of medical laboratory assistants on competency characteristics for their occupation is presented in this document. (Medical laboratory assistant is one of seventeen occupation groups included in this research.) The competencies are reported in five categories: (1) those competencies selected by the respondents from a list of 720 health occupations competencies; (2) the percentage rate which respondents reported practicing the competency item; (3) type of competency (indicated as the performance of a physical skill or action, or an understanding or mental comprehension); (4) use frequency (daily, weekly, monthly); and (5) training needed to achieve proficiency in that competency (formal instruction, demonstration, on-the-job). (The final report of the survey is available as CE 018 899. Survey results for the other occupational groups are also available--see CE 018 900-916.) (JH)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

ED163236

Final Report

Project No. 498 AH 60116

Grant No. G007 603 320

Ronald B. McClurg, Ph.D.

Des Moines Area Community College

2006 Ankeny Boulevard

Ankeny, Iowa 50021

Common Intra-Cluster Competencies Needed in Selected  
Occupational Clusters

Supplemental Volume IX: Medical Lab Assistant

May, 1978

U.S. DEPARTMENT OF

HEALTH, EDUCATION, AND WELFARE

Office of Education

Bureau of

Occupational and Adult Education

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

CE 018 908

## Forward

This volume contains detailed competency characteristics collected in the vocational education research project entitled "Common Intracluster Competencies Needed in Selected Occupational Clusters - Health Occupations".

The information herein summarizes the responses of one of the seventeen occupational groups included in the research. The study included 720 individual competency items, both skills and understandings, which were presented to a sample of health occupation employees in Iowa and/or the central states area.

The data included in this volume summarizes the responses by those surveyed in the occupation listed on the cover.

### Description of the Data

Essentially five competency characteristics are presented on the pages that follow. The total number of respondents to the survey is indicated following the table heading in the format N=\_\_. Those characteristics include:

1. Competencies reported by respondents -

The first column is a list of the competencies reported by respondents. Each competency carries the item number from the comprehensive listing utilized in the research process and as presented in the main report. Competencies not reported by respondents were not included to preserve space.

2. Practice rate -

The second column presents the percentage rate which respondents reported practicing the competency item. Practice rates of fifteen percent or less are indicated by an asterisk (\*) and lack additional characteristic percentage computations because of their small cell size.

The remaining three competency characteristics represent responses of those who indicated that they practiced the competency.

3. Type of competency -

Columns three and four indicate the percentage of the type of competency which respondents indicated characterized the nature of their activity. An "S" indicates the performance of a physical skill or physical action, while a "U" reflects that an understanding or mental comprehension only was needed for the competency. (See the Glossary in the main report for working definitions of skill and understanding).

4. Use frequency -

Distribution of the percentage of frequency which competencies were practiced, for those who reported possession of them, is presented in columns five, six, and seven. "D" in column five represents a competency exercised daily, "W" in column six represents a weekly frequency, while "M" in column seven reflects monthly or less frequent practice.

## 5. Training needed -

The final three columns summarize the percentage distribution of the nature of training which respondents felt was necessary to achieve proficiency in the competency. The "I" in column eight represents formal instruction, such as would be presented in an academic setting. A "D" (column nine) indicates that a demonstration of how to perform the competency is all that is needed to achieve proficiency, while "E" in column ten indicates that on-the-job exposure is adequate for developing the competency.

Rounded, whole-number percent figures were used in the preparation of this report, since the findings were considered to represent trends more than finite characteristics. Multiple column computations were forced to total 100 percent by the rounding process except for those items where equal numbers in each of three columns were reported. In those cases the total of 99 percent reflects all responses reported.

### Using the Data

Possible uses and applications of the data are presented in the main body of the research report. The material presented in this supplementary volume will be of most value to those concerned solely with the occupational field which is treated herein.

Competency Characteristics Reported by MEDICAL LAB ASSISTANT (by percent) N=29

| Competency                                                                                                   | Practice<br>Rate | Type |    | Use Frequency |    |     | Training Needed |    |    |
|--------------------------------------------------------------------------------------------------------------|------------------|------|----|---------------|----|-----|-----------------|----|----|
|                                                                                                              |                  | S    | U  | D             | W  | M   | I               | D  | E  |
| 1. Seek guidance to improve performance in patient care.                                                     | 71               | 33   | 67 | 50            | 14 | 36  | 33              | 17 | 50 |
| 2. Participate in/conduct demonstrations of procedures and equipment (in-service).                           | 88               | 86   | 14 | 14            | 0  | 86  | 33              | 33 | 33 |
| 3. Orient new personnel to unit facilities, routines and other personnel.                                    | 76               | 56   | 44 | 19            | 12 | 69  | 38              | 19 | 43 |
| 4. Advise health professionals on the technicalities and procedures involved in operating special equipment. | 38               | 100  | 0  | 0             | 0  | 100 | 33              | 67 | 0  |
| 5. Practice established routines and policies of the health care facility.                                   | 90               | 53   | 47 | 74            | 5  | 21  | 37              | 21 | 42 |
| 6. Supervise subordinates within the health care facility.                                                   | *                |      |    |               |    |     |                 |    |    |
| 7. Give "on the job" instruction.                                                                            | 90               | 84   | 16 | 42            | 11 | 47  | 42              | 21 | 37 |
| 9. Develop criteria for the selection of records for review and retention.                                   | 29               | 33   | 67 | 33            | 17 | 50  | 66              | 17 | 17 |
| 10. Establish work priorities and schedule work assignments.                                                 | 50               | 50   | 50 | 75            | 0  | 25  | 25              | 25 | 50 |
| 11. Identify operational deficiencies and recommend corrections.                                             | 67               | 50   | 50 | 46            | 8  | 46  | 38              | 31 | 31 |

| <u>Competency</u>                                                                              | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|------------------------------------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                                                |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 12. Evaluate subordinate employee performance.                                                 | *                        |             |          |                      |          |          |                        |          |          |
| 13. Develop job description.                                                                   | 38                       | 50          | 50       | 13                   | 0        | 87       | 63                     | 0        | 37       |
| 14. Consult with health professionals on purchasing/<br>constructing/using special appliances. | 50                       | 25          | 75       | 0                    | 50       | 50       | 33                     | 67       | 0        |
| 15. Interview/evaluate/hire prospective personnel.                                             | 19                       | 50          | 50       | 25                   | 0        | 75       | 50                     | 0        | 50       |
| 16. Maintain standards of employees' personal hygiene<br>as related to job performance.        | 50                       | 100         | 0        | 75                   | 25       | 0        | 0                      | 0        | 100      |
| 17. Insure that all subordinates are on duty.                                                  | 19                       | 75          | 25       | 60                   | 0        | 40       | 25                     | 25       | 50       |
| 18. Attend and participate in staff meetings.                                                  | 63                       | 60          | 40       | 0                    | 0        | 100      | 33                     | 33       | 33       |
| 19. Develop policies and establish departmental pro-<br>cedures.                               | 52                       | 64          | 36       | 20                   | 0        | 80       | 60                     | 10       | 30       |
| 20. Inform personnel of new or changed policies and<br>procedures.                             | 50                       | 20          | 80       | 40                   | 0        | 60       | 25                     | 25       | 50       |
| 21. Provide liaison between doctor and other pro-<br>fessional associates.                     | 24                       | 60          | 40       | 80                   | 0        | 20       | 20                     | 0        | 80       |
| 22. Review and approve employee's payroll time and<br>salary.                                  | *                        |             |          |                      |          |          |                        |          |          |
| 23. Coordinate work schedules with other departments.                                          | 33                       | 100         | 0        | 43                   | 14       | 43       | 17                     | 0        | 83       |

| <u>Competency</u>                                                                                                          | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|----------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                                                                            |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 24. Teach special procedures to department members/students/health care professionals.                                     | 38                       | 67          | 33       | 33                   | 0        | 67       | 0                      | 0        | 100      |
| 25. Teach safety techniques as needed.                                                                                     | 57                       | 75          | 25       | 8                    | 17       | 75       | 42                     | 42       | 16       |
| 26. Develop hospital disaster plan.                                                                                        | 25                       | 0           | 100      | 0                    | 0        | 100      | 0                      | 0        | 100      |
| 27. Inform personnel of potential hazards in their working areas.                                                          | 48                       | 30          | 70       | 20                   | 0        | 80       | 24                     | 38       | 38       |
| 28. Demonstrate tact in giving and withholding information concerning patient care/operations of the health care facility. | 63                       | 0           | 100      | 50                   | 0        | 50       | 0                      | 0        | 100      |
| 29. Represent the department and facility at community meetings.                                                           | 29                       | 67          | 33       | 0                    | 17       | 83       | 17                     | 17       | 66       |
| 30. Attend meetings and participate in community activities related to doctor's practice.                                  | 50                       | 50          | 50       | 0                    | 0        | 100      | 0                      | 25       | 75       |
| 31. Arrange meetings, conferences/travel accommodations.                                                                   | 33                       | 57          | 43       | 0                    | 0        | 100      | 0                      | 33       | 67       |
| 32. Assist in the orientation of volunteers, students, and new staff.                                                      | 50                       | 75          | 25       | 0                    | 0        | 100      | 0                      | 33       | 67       |
| 33. Recommend materials to be used in training volunteers.                                                                 | *                        |             |          |                      |          |          |                        |          |          |
| 34. Train volunteers in specific techniques.                                                                               | 25                       | 50          | 50       | 0                    | 0        | 100      | 0                      | 0        | 100      |

| <u>Competency</u>                                                                      | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|----------------------------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                                        |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 36. Conduct tours of facilities.                                                       | 25                       | 50          | 50       | 0                    | 0        | 100      | 0                      | 0        | 100      |
| 40. Assist patient in and out of bed.                                                  | 25                       | 100         | 0        | 0                    | 0        | 100      | 0                      | 50       | 50       |
| 41. Assist patient in walking.                                                         | 19                       | 75          | 25       | 50                   | 0        | 50       | 0                      | 0        | 100      |
| 42. Transport patient on stretcher/wheelchair.                                         | 25                       | 100         | 0        | 0                    | 0        | 100      | 0                      | 50       | 50       |
| 44. Assist patient in use of commode, urinal or bedpan.                                | *                        |             |          |                      |          |          |                        |          |          |
| 46. Assist in resolving patient complaints.                                            | 25                       | 50          | 50       | 0                    | 0        | 100      | 0                      | 50       | 50       |
| 47. Obtain signature on various patient/family consent forms.                          | 19                       | 75          | 25       | 50                   | 25       | 25       | 25                     | 25       | 50       |
| 51. Obtain information from patient/family.                                            | 33                       | 71          | 29       | 57                   | 29       | 14       | 14                     | 43       | 43       |
| 53. Receive patient, explain tests and procedures to them and allay their fears.       | 52                       | 55          | 45       | 40                   | 30       | 30       | 30                     | 30       | 40       |
| 54. Attend to patient's comfort before, during, and after examination/tests/treatment. | 38                       | 33          | 67       | 67                   | 0        | 33       | 0                      | 33       | 67       |
| 55. Aid patient in completing insurance forms.                                         | 19                       | 50          | 50       | 75                   | 25       | 0        | 25                     | 25       | 50       |
| 57. Explain fees to patient.                                                           | 38                       | 75          | 25       | 63                   | 25       | 12       | 0                      | 63       | 37       |
| 61. Explain follow-up services to patient.                                             | 19                       | 50          | 50       | 75                   | 0        | 25       | 0                      | 25       | 75       |

| <u>Competency</u>                                                                                                  | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|--------------------------------------------------------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                                                                    |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 63. Assist in establishing a comfortable relationship between the patient and the health care professional.        | 52                       | 55          | 45       | 78                   | 11       | 11       | 20                     | 30       | 50       |
| 64. Observe negative/positive physical and emotional responses to treatments, medications, nursing care, etc.      | 25                       | 0           | 100      | 50                   | 0        | 50       | 0                      | 0        | 100      |
| 65. Interpret patient's signs, symptoms, behavior, etc.                                                            | 29                       | 50          | 50       | 100                  | 0        | 0        | 66                     | 17       | 17       |
| 67. Observe patient's general physical condition, appearance, and behavior.                                        | 29                       | 67          | 33       | 100                  | 0        | 0        | 50                     | 17       | 33       |
| 69. Record and chart vital signs, height, weight, and/or other conditions as directed by health care professional. | 33                       | 86          | 14       | 86                   | 0        | 14       | 43                     | 14       | 43       |
| 71. Follow established admitting procedures.                                                                       | 19                       | 75          | 25       | 100                  | 0        | 0        | 25                     | 25       | 50       |
| 72. Maintain a use record on special equipment.                                                                    | 38                       | 67          | 33       | 33                   | 33       | 33       | 67                     | 0        | 33       |
| 73. Conduct routine financial matters of employer (collect fees, make deposits, send statements, etc.).            | 19                       | 100         | 0        | 75                   | 0        | 25       | 0                      | 25       | 75       |
| 74. Maintain appointment control.                                                                                  | *                        |             |          |                      |          |          |                        |          |          |
| 75. Complete insurance forms.                                                                                      | 19                       | 75          | 25       | 100                  | 0        | 0        | 0                      | 75       | 25       |

| <u>Competency</u>                                                     | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|-----------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                       |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 77. Schedule patient treatment sessions.                              | 24                       | 100         | 0        | 60                   | 0        | 40       | 20                     | 20       | 60       |
| 78. Maintain record of all requests for patient information.          | 25                       | 0           | 100      | 100                  | 0        | 0        | 0                      | 0        | 100      |
| 79. Obtain charts of patients for whom information is requested.      | 38                       | 75          | 25       | 63                   | 12       | 25       | 29                     | 29       | 42       |
| 80. Prepare patient record folder (chart).                            | 38                       | 33          | 67       | 100                  | 0        | 0        | 0                      | 0        | 100      |
| 82. Sort/file/organize documents, certificates, patient records, etc. | *                        |             |          |                      |          |          |                        |          |          |
| 85. Maintain and prepare productivity reports.                        | *                        |             |          |                      |          |          |                        |          |          |
| 87. Prepare daily census.                                             | *                        |             |          |                      |          |          |                        |          |          |
| 89. Process mail and correspondence (both incoming and outgoing).     | 24                       | 80          | 20       | 40                   | 40       | 20       | 0                      | 60       | 40       |
| 90. Process payroll time cards.                                       | *                        |             |          |                      |          |          |                        |          |          |
| 91. Prepare requests for vacation/sick leave.                         | 33                       | 57          | 43       | 0                    | 14       | 86       | 0                      | 33       | 67       |
| 92. Prepare requisitions.                                             | 25                       | 50          | 50       | 0                    | 50       | 50       | 0                      | 100      | 0        |
| 93. Handle telephone calls.                                           | 90                       | 68          | 42       | 84                   | 0        | 16       | 16                     | 11       | 73       |
| 95. Prepare correspondence/report/summary (not forms).                | 24                       | 60          | 40       | 60                   | 20       | 20       | 25                     | 50       | 25       |

| <u>Competency</u>                                              | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|----------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 97. Mount, label, and file radiographs.                        | 19                       | 75          | 25       | 50                   | 0        | 50       | 60                     | 20       | 20       |
| 99. Record patient's medical/dental history.                   | *                        |             |          |                      |          |          |                        |          |          |
| 103. Maintain personal information card index on each patient. | 24                       | 100         | 0        | 100                  | 0        | 0        | 20                     | 60       | 20       |
| 105. Receive and organize handling of medication samples.      | 24                       | 100         | 0        | 75                   | 25       | 0        | 20                     | 60       | 20       |
| 107. Operate office business machines.                         | 29                       | 83          | 17       | 100                  | 0        | 0        | 17                     | 66       | 17       |
| 111. Maintain catalogs of supplies and equipment.              | 43                       | 78          | 22       | 56                   | 11       | 33       | 22                     | 22       | 56       |
| 113. Maintain a fee schedule for services.                     | 43                       | 78          | 22       | 56                   | 0        | 44       | 11                     | 33       | 56       |
| 114. Record information on blood record card.                  | 83                       | 100         | 0        | 40                   | 0        | 60       | 20                     | 20       | 60       |
| 115. Follow established procedure in filing incident reports.  | 38                       | 38          | 62       | 25                   | 0        | 75       | 0                      | 38       | 62       |
| 116. Process loans of X-ray films.                             | *                        |             |          |                      |          |          |                        |          |          |
| 117. Maintain radiology work record for statistical purposes.  | *                        |             |          |                      |          |          |                        |          |          |
| 118. Receive and record physician's verbal orders.             | *                        |             |          |                      |          |          |                        |          |          |
| 119. Transcribe physician's orders.                            | 29                       | 83          | 17       | 100                  | 0        | 0        | 17                     | 0        | 83       |

| <u>Competency</u>                                                                                                                            | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                                                                                              |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 120. Follow established procedures for processing authorization/accident report forms (autopsy, surgery, diagnostic tests, discharge forms). | 25                       | 0           | 100      | 50                   | 0        | 50       | 0                      | 0        | 100      |
| 122. Adjust side rails and height of bed.                                                                                                    | 38                       | 67          | 33       | 33                   | 0        | 67       | 0                      | 0        | 100      |
| 123. Open sterile packages and packs.                                                                                                        | 67                       | 100         | 0        | 64                   | 7        | 29       | 23                     | 48       | 29       |
| 141. Test urine for sugar and acetone.                                                                                                       | 90                       | 89          | 11       | 79                   | 0        | 21       | 79                     | 16       | 5        |
| 143. Calibrate isotopes against a standard.                                                                                                  | 19                       | 75          | 25       | 50                   | 50       | 0        | 75                     | 25       | 0        |
| 145. Prepare injections using measured/sterilized dose.                                                                                      | 29                       | 100         | 0        | 66                   | 17       | 17       | 83                     | 0        | 17       |
| 146. Set up instruments for operation in vitro/vivo studies.                                                                                 | *                        |             |          |                      |          |          |                        |          |          |
| 147. Make simple dose calculations for in vitro/vivo examinations.                                                                           | 24                       | 80          | 20       | 80                   | 20       | 0        | 100                    | 0        | 0        |
| 148. Accumulate and process data for doctor's interpretation.                                                                                | 25                       | 50          | 50       | 100                  | 0        | 0        | 50                     | 0        | 50       |
| 151. Evaluate adequacy of work space.                                                                                                        | 33                       | 43          | 57       | 14                   | 29       | 57       | 14                     | 14       | 72       |
| 153. Receive specimen from patient, record pertinent data on container, and place in proper storage.                                         | 67                       | 93          | 7        | 79                   | 7        | 14       | 58                     | 21       | 21       |

| <u>Competency</u>                                                                                          | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|------------------------------------------------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                                                            |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 155. <del>Inspect</del> or modify equipment for special requirements.                                      | 33                       | 71          | 29       | 29                   | 29       | 42       | 14                     | 47       | 39       |
| 157. Operate a rectilinear scanner for conventional scanning/slow dynamic studies.                         | *                        |             |          |                      |          |          |                        |          |          |
| 158. Organize and store blood.                                                                             | 63                       | 100         | 0        | 60                   | 20       | 20       | 75                     | 25       | 0        |
| 160. Perform preliminary interpretations of observations for doctor.                                       | *                        |             |          |                      |          |          |                        |          |          |
| 161. Assay wet chemical solutions for activity and contaminants.                                           | 29                       | 50          | 50       | 100                  | 0        | 0        | 67                     | 33       | 0        |
| 163. Know and apply basic first aid techniques including artificial respiration and cardiac resuscitation. | 62                       | 85          | 15       | 15                   | 23       | 62       | 62                     | 38       | 0        |
| 164. Monitor radiation levels in compliance with hospital regulations.                                     | *                        |             |          |                      |          |          |                        |          |          |
| 173. Apply simple casts and splints.                                                                       | *                        |             |          |                      |          |          |                        |          |          |
| 180. Take and process X-rays.                                                                              | 38                       | 100         | 0        | 0                    | 0        | 100      | 67                     | 33       | 0        |
| 182. Administer intravenous fluids, blood, etc.                                                            | *                        |             |          |                      |          |          |                        |          |          |
| 184. Adjust voltage, amperage, and timer of X-ray machine.                                                 | 38                       | 100         | 0        | 0                    | 0        | 100      | 67                     | 33       | 0        |

| <u>Competency</u>                                                                     | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|---------------------------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                                       |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 204. Receive and preserve biopsy specimens.                                           | *                        |             |          |                      |          |          |                        |          |          |
| 221. Prepare statistical reports.                                                     | *                        |             |          |                      |          |          |                        |          |          |
| 223. Inform and advise administration as to trends and significant data.              | *                        |             |          |                      |          |          |                        |          |          |
| 225. Check records (charts) for deficiencies.                                         | *                        |             |          |                      |          |          |                        |          |          |
| 233. Transcribe from recording machines using magnetic belts or recorded discs.       | 19                       | 100         | 0        | 50                   | 25       | 25       | 0                      | 0        | 100      |
| 234. Type information onto various forms.                                             | *                        |             |          |                      |          |          |                        |          |          |
| 235. Change discs, belts, or tapes on recording equipment.                            | 19                       | 100         | 0        | 50                   | 0        | 50       | 0                      | 0        | 100      |
| 236. Maintain daily production record.                                                | 25                       | 100         | 0        | 100                  | 0        | 0        | 0                      | 0        | 100      |
| 237. Recommend policies for departmental functions.                                   | 19                       | 50          | 50       | 25                   | 25       | 50       | 25                     | 50       | 25       |
| 279. Operate audiovisual equipment, e.g., projector, recorder, etc.                   | *                        |             |          |                      |          |          |                        |          |          |
| 404. Exercise precautions in administering and handling potentially dangerous agents. | *                        |             |          |                      |          |          |                        |          |          |
| 414. Assist with/apply rib belts.                                                     | 25                       | 100         | 0        | 0                    | 0        | 100      | 50                     | 50       | 0        |
| 419. Do cultures (nose, throat, wound).                                               | 71                       | 93          | 7        | 53                   | 7        | 40       | 60                     | 20       | 20       |

| <u>Competency</u>                                                                            | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|----------------------------------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                                              |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 421. Review scheduled appointments with doctor.                                              | 19                       | 75          | 25       | 75                   | 25       | 0        | 0                      | 0        | 100      |
| 424. Centrifuge sample of the urine specimen.                                                | 100                      | 100         | 0        | 88                   | 0        | 12       | 43                     | 14       | 43       |
| 425. Perform bio-chemical tests (e.g., glucose, protein, etc.) using paper strips or tablet. | 90                       | 89          | 11       | 79                   | 0        | 21       | 61                     | 22       | 17       |
| 426. Perform bile tests (simple tablet method).                                              | 88                       | 100         | 0        | 86                   | 14       | 0        | 50                     | 0        | 50       |
| 427. Examine urine specimens microscopically.                                                | 95                       | 75          | 25       | 85                   | 0        | 15       | 90                     | 5        | 5        |
| 428. Obtain blood specimen from capillary.                                                   | 100                      | 100         | 0        | 88                   | 12       | 0        | 42                     | 29       | 29       |
| 429. Obtain blood specimen from vein.                                                        | 100                      | 89          | 11       | 86                   | 4        | 10       | 80                     | 5        | 15       |
| 430. Prepare and stain blood smears.                                                         | 100                      | 100         | 0        | 88                   | 0        | 12       | 42                     | 29       | 29       |
| 431. Perform hemoglobin test/hematocrit reading.                                             | 95                       | 95          | 5        | 85                   | 5        | 10       | 78                     | 11       | 11       |
| 432. Perform red blood cell count (RBC).                                                     | 88                       | 100         | 0        | 86                   | 0        | 14       | 67                     | 33       | 0        |
| 433. Perform erythrocyte sedimentation rate (SED RATE).                                      | 95                       | 95          | 5        | 65                   | 15       | 20       | 74                     | 5        | 21       |
| 434. Perform white blood cell count (WBC).                                                   | 100                      | 100         | 0        | 100                  | 0        | 0        | 71                     | 29       | 0        |
| 435. Operate colorimeter/hemoglobinometer/micro-hematocrit reader.                           | 95                       | 90          | 10       | 71                   | 10       | 19       | 74                     | 16       | 10       |
| 436. Operate manual/automatic cell counting equipment.                                       | 88                       | 100         | 0        | 100                  | 0        | 0        | 67                     | 33       | 0        |

| <u>Competency</u>                                                    | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|----------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                      |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 437. Inoculate specimen in culture media.                            | 86                       | 94          | 6        | 83                   | 6        | 11       | 59                     | 29       | 12       |
| 438. Prepare wet mounts.                                             | 63                       | 100         | 0        | 60                   | 0        | 40       | 50                     | 50       | 0        |
| 439. Stain microbial specimens.                                      | 90                       | 95          | 5        | 79                   | 8        | 13       | 72                     | 22       | 6        |
| 440. Examine stained specimens microscopically.                      | 88                       | 86          | 14       | 86                   | 0        | 14       | 83                     | 17       | 0        |
| 441. Assist in obtaining smears.                                     | 67                       | 93          | 7        | 57                   | 0        | 43       | 62                     | 8        | 30       |
| 442. Assist in obtaining tissue specimens.                           | 50                       | 75          | 25       | 25                   | 0        | 75       | 0                      | 33       | 67       |
| 443. Use sterilization color indicators to test sterilizer.          | 33                       | 86          | 14       | 29                   | 42       | 29       | 57                     | 14       | 29       |
| 444. Handle and store sterilized materials to prevent contamination. | 38                       | 100         | 0        | 100                  | 0        | 0        | 0                      | 67       | 33       |
| 445. Assist physician during EKG test.                               | 33                       | 100         | 0        | 29                   | 29       | 42       | 71                     | 0        | 29       |
| 446. Monitor EKG graph for abnormal or erratic tracings.             | 38                       | 67          | 33       | 100                  | 0        | 0        | 67                     | 0        | 33       |
| 447. Mount EKG graph on card.                                        | 48                       | 90          | 10       | 30                   | 20       | 50       | 56                     | 22       | 22       |
| 448. Operate EKG machine.                                            | 75                       | 83          | 17       | 50                   | 0        | 50       | 40                     | 20       | 40       |
| 449. Prepare a tray for routine/special procedures.                  | 52                       | 100         | 0        | 27                   | 27       | 46       | 36                     | 9        | 55       |
| 452. Describe the nature of patient's illness or injury.             | 38                       | 33          | 67       | 67                   | 0        | 33       | 0                      | 0        | 100      |

| <u>Competency</u>                                                 | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|-------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                   |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 453. Assist physician in performing visual/hearing acuity, tests. | 19                       | 75          | 25       | 25                   | 50       | 25       | 50                     | 25       | 25       |
| 457. Assist physician in application of cast.                     | 29                       | 83          | 17       | 0                    | 20       | 80       | 33                     | 33       | 33       |
| 458. Receive and primary process cultures.                        | 75                       | 100         | 0        | 50                   | 33       | 17       | 100                    | 0        | 0        |
| 459. Record/report colony counts on urine, etc.                   | 57                       | 67          | 33       | 67                   | 8        | 25       | 73                     | 9        | 18       |
| 460. Stain bacteriological smears.                                | 88                       | 100         | 0        | 42                   | 29       | 29       | 83                     | 0        | 17       |
| 461. Streak plates.                                               | 86                       | 100         | 0        | 72                   | 11       | 17       | 47                     | 29       | 24       |
| 462. Cultivate mycology specimens for primary isolation.          | 25                       | 100         | 0        | 0                    | 50       | 50       | 100                    | 0        | 0        |
| 463. Perform KOH preparation for dermatophytes.                   | 43                       | 89          | 11       | 33                   | 11       | 56       | 67                     | 33       | 0        |
| 464. Stain mycology specimens.                                    | 25                       | 100         | 0        | 50                   | 0        | 50       | 50                     | 0        | 50       |
| 465. Examine specimens macroscopically/microscopically.           | 86                       | 83          | 17       | 61                   | 6        | 33       | 82                     | 0        | 18       |
| 466. Perform concentration and flotation techniques.              | 38                       | 100         | 0        | 0                    | 33       | 67       | 50                     | 0        | 50       |
| 467. Identify parastic and disease-carrying arthropods.           | 52                       | 64          | 36       | 20                   | 10       | 70       | 90                     | 10       | 0        |
| 468. Identify protozoans, cestodes, nematodes, and trematodes.    | 38                       | 67          | 33       | 0                    | 33       | 67       | 100                    | 0        | 0        |
| 469. Stain parasitological smears.                                | 48                       | 90          | 10       | 22                   | 11       | 67       | 67                     | 33       | 0        |

| <u>Competency</u>                                                      | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|------------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                        |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 470. Perform antistreptolysin "o" titers.                              | 63                       | 80          | 20       | 0                    | 40       | 60       | 100                    | 0        | 0        |
| 471. Perform colloidal gold test.                                      | 38                       | 88          | 12       | 14                   | 0        | 86       | 57                     | 43       | 0        |
| 472. Perform "C" reactive protein tests.                               | 50                       | 100         | 0        | 0                    | 25       | 75       | 67                     | 0        | 33       |
| 473. Perform febrile agglutination (e.g., salmonella) tests.           | 71                       | 93          | 7        | 7                    | 7        | 86       | 86                     | 14       | 0        |
| 474. Perform heterophile presumptive test.                             | 63                       | 80          | 20       | 0                    | 40       | 60       | 50                     | 50       | 0        |
| 475. Perform infectious mononucleosis procedures monospot or monotest. | 95                       | 90          | 10       | 35                   | 20       | 45       | 79                     | 16       | 5        |
| 476. Perform latex fixation test.                                      | 75                       | 100         | 0        | 17                   | 33       | 50       | 60                     | 20       | 20       |
| 477. Perform rheumatoid arthritis test (RA).                           | 86                       | 94          | 6        | 39                   | 17       | 44       | 82                     | 18       | 0        |
| 478. Perform and read agglutination tests.                             | 75                       | 100         | 0        | 17                   | 33       | 50       | 60                     | 40       | 0        |
| 479. Perform and read flocculation tests.                              | 76                       | 88          | 12       | 31                   | 13       | 56       | 93                     | 7        | 0        |
| 480. Perform VDRL test.                                                | 63                       | 100         | 0        | 20                   | 0        | 80       | 50                     | 50       | 0        |
| 481. Perform bleeding time procedures.                                 | 81                       | 82          | 18       | 41                   | 18       | 41       | 88                     | 12       | 0        |
| 482. Prepare and stain blood smears.                                   | 38                       | 100         | 0        | 74                   | 13       | 13       | 72                     | 14       | 14       |
| 483. Perform clot retraction test.                                     | 81                       | 82          | 18       | 35                   | 24       | 41       | 88                     | 12       | 0        |

| <u>Competency</u>                                       | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|---------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                         |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 484. Perform venous whole blood coagulation time tests. | 88                       | 100         | 0        | 42                   | 29       | 29       | 83                     | 17       | 0        |
| 485. Perform differential cell counts.                  | 90                       | 79          | 21       | 58                   | 21       | 21       | 94                     | 0        | 6        |
| 486. Perform eosinophil count.                          | 50                       | 100         | 0        | 25                   | 0        | 75       | 100                    | 0        | 0        |
| 487. Perform erythrocyte fragility tests.               | 71                       | 87          | 13       | 14                   | 22       | 64       | 86                     | 14       | 0        |
| 488. Perform fibrinogen deficiency test.                | 50                       | 100         | 0        | 50                   | 0        | 50       | 67                     | 33       | 0        |
| 489. Perform fibrinolysin tests.                        | 67                       | 86          | 14       | 14                   | 7        | 79       | 77                     | 15       | 8        |
| 490. Perform hematocrit tests.                          | 100                      | 100         | 0        | 88                   | 0        | 12       | 57                     | 14       | 29       |
| 491. Perform hemoglobin tests.                          | 90                       | 89          | 11       | 74                   | 11       | 15       | 83                     | 11       | 6        |
| 492. Prepare lupus erythematosus (L.E.) slides.         | 63                       | 80          | 20       | 0                    | 0        | 100      | 50                     | 25       | 25       |
| 493. Stain and read malaria smears.                     | 57                       | 75          | 25       | 27                   | 0        | 73       | 90                     | 0        | 10       |
| 494. Perform partial thromboplastin time (PTT) test.    | 75                       | 100         | 0        | 83                   | 27       | 0        | 80                     | 20       | 0        |
| 495. Perform platelet count.                            | 90                       | 84          | 16       | 58                   | 16       | 26       | 100                    | 0        | 0        |
| 496. Perform prothrombin consumption and time test.     | 75                       | 100         | 0        | 50                   | 17       | 33       | 80                     | 20       | 0        |
| 497. Perform reticulocyte cell count.                   | 90                       | 84          | 16       | 39                   | 22       | 39       | 94                     | 6        | 0        |
| 498. Perform erythrocyte sedimentation rate.            | 75                       | 100         | 0        | 100                  | 0        | 0        | 40                     | 20       | 40       |

| <u>Competency</u>                             | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|-----------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                               |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 499. Perform sickle cell preparations.        | 62                       | 69          | 31       | 18                   | 18       | 64       | 82                     | 9        | 9        |
| 500. Perform spinal fluid cell counts.        | 63                       | 100         | 0        | 0                    | 0        | 100      | 75                     | 25       | 0        |
| 501. Perform acetone or ketone tests.         | 81                       | 88          | 12       | 65                   | 12       | 23       | 67                     | 27       | 6        |
| 502. Perform Addis counts.                    | 38                       | 100         | 0        | 0                    | 0        | 100      | 50                     | 50       | 0        |
| 503. Perform Bence-Jones protein tests.       | 71                       | 93          | 7        | 7                    | 20       | 73       | 71                     | 21       | 8        |
| 504. Perform bile tests.                      | 75                       | 100         | 0        | 67                   | 0        | 33       | 40                     | 20       | 40       |
| 505. Perform bilirubin test.                  | 86                       | 89          | 11       | 44                   | 28       | 28       | 88                     | 6        | 6        |
| 506. Perform true glucose tests.              | 75                       | 100         | 0        | 83                   | 17       | 0        | 60                     | 20       | 20       |
| 507. Perform urine hemoglobin (blood) test.   | 86                       | 89          | 11       | 72                   | 17       | 11       | 76                     | 18       | 6        |
| 508. Perform ph tests.                        | 75                       | 100         | 0        | 100                  | 0        | 0        | 60                     | 20       | 20       |
| 509. Perform porphyrins tests.                | 67                       | 86          | 14       | 14                   | 7        | 79       | 77                     | 15       | 8        |
| 510. Perform pregnancy tests.                 | 88                       | 100         | 0        | 57                   | 29       | 14       | 50                     | 17       | 33       |
| 511. Perform qualitative urine protein tests. | 71                       | 93          | 7        | 57                   | 7        | 36       | 79                     | 7        | 14       |
| 512. Perform specific gravity tests.          | 88                       | 100         | 0        | 100                  | 0        | 0        | 50                     | 17       | 33       |
| 513. Perform urobilinogen tests.              | 71                       | 80          | 20       | 40                   | 13       | 47       | 79                     | 14       | 7        |

| <u>Competency</u>                                           | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|-------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                             |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 514. Perform acid phosphatase test.                         | 63                       | 100         | 0        | 40                   | 0        | 60       | 75                     | 0        | 25       |
| 515. Perform serum albumin tests.                           | 76                       | 94          | 6        | 56                   | 19       | 25       | 88                     | 12       | 0        |
| 516. Perform A/G ratio.                                     | 75                       | 100         | 0        | 50                   | 0        | 50       | 83                     | 0        | 17       |
| 517. Perform blood alcohol test.                            | 71                       | 80          | 20       | 21                   | 29       | 50       | 86                     | 14       | 0        |
| 518. Perform alkaline phosphatase test.                     | 75                       | 100         | 0        | 50                   | 0        | 50       | 80                     | 0        | 20       |
| 519. Perform amylase test.                                  | 76                       | 88          | 12       | 38                   | 38       | 24       | 87                     | 13       | 0        |
| 520. Perform bilirubin (direct/indirect) test.              | 88                       | 100         | 0        | 57                   | 29       | 14       | 83                     | 0        | 17       |
| 521. Perform bromosulphalein retention (BSP) test.          | 38                       | 100         | 0        | 13                   | 13       | 74       | 100                    | 0        | 0        |
| 522. Perform calcium tests.                                 | 63                       | 100         | 0        | 20                   | 20       | 60       | 75                     | 0        | 25       |
| 523. Perform calculus analyses tests.                       | 43                       | 100         | 0        | 11                   | 22       | 67       | 88                     | 12       | 0        |
| 524. Perform carbon monoxide/carbon dioxide determinations. | 38                       | 100         | 0        | 67                   | 33       | 0        | 100                    | 0        | 0        |
| 525. Perform cephalin flocculations.                        | 43                       | 100         | 0        | 20                   | 30       | 50       | 100                    | 0        | 0        |
| 526. Perform chlorides tests.                               | 63                       | 100         | 0        | 80                   | 20       | 0        | 75                     | 25       | 0        |
| 527. Perform total cholesterol tests.                       | 81                       | 94          | 6        | 70                   | 6        | 24       | 81                     | 19       | 0        |
| 528. Perform creatine phosphokinase (CPK) tests.            | 75                       | 100         | 0        | 50                   | 33       | 17       | 80                     | 0        | 20       |

| <u>Competency</u>                                                | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                  |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 529. Perform serum creatinine tests.                             | 86                       | 89          | 11       | 61                   | 11       | 28       | 82                     | 18       | 0        |
| 530. Perform creatinine clearance tests.                         | 63                       | 100         | 0        | 0                    | 20       | 80       | 100                    | 0        | 0        |
| 531. Perform enzyme analysis tests.                              | 71                       | 87          | 13       | 60                   | 13       | 27       | 80                     | 20       | 0        |
| 532. Perform gastric analysis tests.                             | 38                       | 100         | 0        | 0                    | 0        | 100      | 100                    | 0        | 0        |
| 533. Perform glucose tests.                                      | 86                       | 89          | 11       | 66                   | 17       | 17       | 82                     | 18       | 0        |
| 534. Perform glucose tolerance tests.                            | 88                       | 100         | 0        | 14                   | 14       | 72       | 83                     | 0        | 17       |
| 535. Perform serum glutamic oxalacetic transaminase (SGOT) test. | 81                       | 94          | 6        | 53                   | 18       | 29       | 81                     | 19       | 0        |
| 536. Perform serum glutamic pyruvic transaminase (SGT) test.     | 75                       | 100         | 0        | 17                   | 50       | 33       | 80                     | 0        | 20       |
| 537. Perform icterus index tests.                                | 52                       | 91          | 9        | 45                   | 10       | 45       | 90                     | 0        | 10       |
| 538. Perform lactic dehydrogenase (LDH) tests.                   | 75                       | 100         | 0        | 33                   | 33       | 33       | 80                     | 0        | 20       |
| 539. Perform lipase tests.                                       | 62                       | 85          | 15       | 30                   | 8        | 62       | 83                     | 17       | 0        |
| 540. Perform blood oxygen tests.                                 | 63                       | 100         | 0        | 0                    | 60       | 40       | 100                    | 0        | 0        |
| 541. Perform phenosulfonphthalein (PSP) excretion test.          | 33                       | 71          | 19       | 0                    | 14       | 86       | 83                     | 17       | 0        |
| 542. Perform phosphorus tests.                                   | 50                       | 100         | 0        | 25                   | 0        | 75       | 100                    | 0        | 0        |

| <u>Competency</u>                                          | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                            |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 543. Perform potassium determinations.                     | 86                       | 89          | 11       | 67                   | 5        | 28       | 82                     | 18       | 0        |
| 544. Perform urine porphyrin and/or porphobilriogen tests. | 38                       | 100         | 0        | 0                    | 0        | 100      | 50                     | 50       | 0        |
| 545. Perform total protein tests.                          | 76                       | 94          | 6        | 63                   | 6        | 31       | 80                     | 20       | 0        |
| 546. Perform salicylate level tests.                       | 63                       | 100         | 0        | 0                    | 0        | 100      | 100                    | 0        | 0        |
| 547. Perform sodium determinations.                        | 76                       | 88          | 12       | 69                   | 6        | 25       | 81                     | 19       | 0        |
| 548. Perform thymol turbidity tests.                       | *                        |             |          |                      |          |          |                        |          |          |
| 549. Perform blood urea nitrogen (BUN) tests.              | 81                       | 88          | 12       | 70                   | 12       | 18       | 82                     | 18       | 0        |
| 550. Perform xylose tolerance tests.                       | *                        |             |          |                      |          |          |                        |          |          |
| 551. Centrifuge and separate serum from clot.              | 95                       | 95          | 5        | 90                   | 5        | 5        | 55                     | 25       | 20       |
| 552. Crossmatch blood.                                     | 63                       | 100         | 0        | 40                   | 60       | 0        | 100                    | 0        | 0        |
| 553. Perform antibody screen and identification tests.     | 81                       | 71          | 29       | 69                   | 6        | 25       | 88                     | 12       | 0        |
| 554. Perform antibody titers (dilutions).                  | 50                       | 100         | 0        | 50                   | 0        | 50       | 100                    | 0        | 0        |
| 555. Perform direct and indirect Coombs tests.             | 71                       | 73          | 27       | 67                   | 6        | 27       | 100                    | 0        | 0        |
| 556. Perform genotype of blood.                            | 50                       | 100         | 0        | 25                   | 25       | 50       | 100                    | 0        | 0        |
| 557. Perform transfusion reaction studies.                 | 71                       | 73          | 27       | 20                   | 13       | 67       | 93                     | 0        | 7        |

| <u>Competency</u>                                                                                                  | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|--------------------------------------------------------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                                                                    |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 558. Prepare and read slide/tube agglutination reactions.                                                          | 75                       | 100         | 0        | 33                   | 67       | 0        | 100                    | 0        | 0        |
| 559. Process blood for packed cells.                                                                               | 57                       | 92          | 8        | 33                   | 17       | 50       | 73                     | 18       | 9        |
| 560. Test blood for ABO grouping and ABO sub-grouping.                                                             | 75                       | 100         | 0        | 33                   | 67       | 0        | 100                    | 0        | 0        |
| 561. Test blood for RH or DU factors.                                                                              | 76                       | 81          | 19       | 62                   | 19       | 19       | 88                     | 12       | 0        |
| 562. Embed/mount/section tissues in preparation for microscopic study.                                             | *                        |             |          |                      |          |          |                        |          |          |
| 563. Stain pap smears.                                                                                             | 29                       | 100         | 0        | 60                   | 0        | 40       | 80                     | 20       | 0        |
| 564. Stain specimens for microscopic study.                                                                        | 50                       | 100         | 0        | 75                   | 0        | 25       | 67                     | 33       | 0        |
| 565. Identify and classify pathogenic bacteria/fungi/parastic arthropods/protozoans/testodes/nematodes/trematodes. | 62                       | 69          | 31       | 70                   | 15       | 15       | 100                    | 0        | 0        |
| 566. Calculate erythrocyte indices.                                                                                | 88                       | 57          | 43       | 71                   | 0        | 29       | 33                     | 17       | 50       |
| 567. Microscopically identify L.E. cells.                                                                          | 43                       | 56          | 44       | 25                   | 13       | 62       | 100                    | 0        | 0        |
| 568. Identify morphological variations of red or white blood cells.                                                | 100                      | 75          | 25       | 88                   | 0        | 12       | 72                     | 14       | 14       |
| 586. Review patient's clinical history.                                                                            | *                        |             |          |                      |          |          |                        |          |          |

| <u>Competency</u>                                                                                                 | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|-------------------------------------------------------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                                                                   |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 587. Load and unload film units.                                                                                  | *                        |             |          |                      |          |          |                        |          |          |
| 588. Affix lead shield to cassette for identification.                                                            | *                        |             |          |                      |          |          |                        |          |          |
| 591. Take X-rays (dental/abdominal/spinal/chest/etc.).                                                            | 19                       | 100         | 0        | 25                   | 25       | 50       | 25                     | 25       | 50       |
| 592. Take X-rays of ribs and sternum, extremities.                                                                | 38                       | 100         | 0        | 0                    | 0        | 100      | 100                    | 0        | 0        |
| 594. Operate mobile X-ray units.                                                                                  | *                        |             |          |                      |          |          |                        |          |          |
| 596. Assist with laminograms, mammograms, chlogiograms, intravenous pyelograms and Iv's.                          | 25                       | 100         | 0        | 0                    | 0        | 100      | 50                     | 50       | 0        |
| 598. Assist with upper GI series, stereoscopic X-rays, ventricueograms.                                           | 25                       | 100         | 0        | 0                    | 0        | 100      | 50                     | 50       | 0        |
| 600. Assist with X-rays for contrast studies of large bowel or colon and esophagus.                               | 25                       | 100         | 0        | 0                    | 0        | 100      | 50                     | 50       | 0        |
| 623. Recognize complications of adverse reactions to treatments.                                                  | 24                       | 20          | 80       | 50                   | 0        | 50       | 80                     | 0        | 20       |
| 624. Minimize hazards throughout the health care facility.                                                        | 50                       | 0           | 100      | 33                   | 0        | 67       | 33                     | 0        | 67       |
| 625. Arrange equipment for convenient and safe use.                                                               | 19                       | 75          | 25       | 100                  | 0        | 0        | 25                     | 0        | 75       |
| 627. Accurately measure body temperature and read clinical thermometer for oral, rectal and axillary temperature. | 24                       | 80          | 20       | 60                   | 20       | 20       | 20                     | 0        | 80       |
| 628. Operate and adjust examining tables.                                                                         | 38                       | 67          | 33       | 67                   | 0        | 33       | 0                      | 33       | 67       |

| <u>Competency</u>                                                                                                                                  | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                                                                                                    |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 634. Knows routine for fire in patient area and demonstrates knowledge of procedures for securing the building and reassuring and aiding patients. | 50                       | 0           | 100      | 33                   | 0        | 67       | 0                      | 50       | 50       |
| 635. Has an understanding of fire prevention and control.                                                                                          | 48                       | 30          | 70       | 40                   | 0        | 60       | 50                     | 0        | 50       |
| 647. Instruct patient with regard to collection of specimen (fecal, urine, eye, nose, throat).                                                     | 48                       | 40          | 60       | 50                   | 20       | 30       | 80                     | 0        | 20       |
| 648. Prepare, instruct and assist patient during EKG test.                                                                                         | 50                       | 100         | 0        | 25                   | 25       | 50       | 33                     | 33       | 33       |
| 651. Direct patient to project completion by praise and encouragement.                                                                             | *                        |             |          |                      |          |          |                        |          |          |
| 670. Abstract simple data from patient's chart.                                                                                                    | *                        |             |          |                      |          |          |                        |          |          |
| 671. Position, gown/drape patient.                                                                                                                 | 24                       | 80          | 20       | 60                   | 0        | 40       | 0                      | 0        | 100      |
| 689. Dispose of contaminated materials and equipment.                                                                                              | 48                       | 70          | 30       | 80                   | 10       | 10       | 50                     | 40       | 10       |
| 692. Clean and maintain service area and equipment, within area of responsibility.                                                                 | 50                       | 50          | 50       | 75                   | 25       | 0        | 25                     | 25       | 50       |
| 693. Order/inventory and store equipment and supplies.                                                                                             | 43                       | 67          | 33       | 12                   | 44       | 44       | 0                      | 22       | 78       |
| 695. Verify performance of instruments/devices against manufacturer's specifications.                                                              | 24                       | 60          | 40       | 40                   | 20       | 40       | 40                     | 40       | 10       |

| <u>Competency</u>                                                                              | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|------------------------------------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                                                |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 696. Determine if equipment needs repair.                                                      | 75                       | 50          | 50       | 50                   | 33       | 17       | 33                     | 17       | 50       |
| 697. Schedule/perform maintenance on equipment.                                                | 57                       | 83          | 17       | 75                   | 0        | 25       | 50                     | 17       | 33       |
| 699. Safely dispose of radioactive wastes.                                                     | 19                       | 75          | 25       | 75                   | 25       | 0        | 75                     | 25       | 0        |
| 702. Clean, sharpen and maintain instruments/equipment as required.                            | 50                       | 50          | 50       | 50                   | 25       | 25       | 25                     | 0        | 75       |
| 703. Control contractual services for maintenance of equipment/facilities.                     | *                        |             |          |                      |          |          |                        |          |          |
| 704. Maintain unexposed radiographic film storage.                                             | *                        |             |          |                      |          |          |                        |          |          |
| 705. Establish and maintain chain of antisepsis.                                               | *                        |             |          |                      |          |          |                        |          |          |
| 706. Prepare instruments for sterilization (chemical, autoclaving, dry heat).                  | 25                       | 50          | 50       | 50                   | 0        | 50       | 0                      | 50       | 50       |
| 707. Sterilize instruments (chemical, autoclaving, dry heat).                                  | 29                       | 83          | 17       | 50                   | 50       | 0        | 33                     | 33       | 33       |
| 708. Inspect all areas and rooms for proper house-keeping, temperature, and adequate supplies. | 25                       | 0           | 100      | 100                  | 0        | 0        | 0                      | 0        | 100      |
| 709. Clean and polish removable appliances.                                                    | 19                       | 75          | 25       | 50                   | 25       | 25       | 0                      | 0        | 100      |
| 711. Check and record temperatures of appliances/equipment.                                    | 62                       | 77          | 23       | 84                   | 8        | 8        | 0                      | 33       | 67       |
| 712. Store/dispose of used blood containers and pilot tubes.                                   | 63                       | 80          | 20       | 80                   | 0        | 20       | 50                     | 0        | 50       |

| <u>Competency</u>                                                                      | <u>Practice<br/>Rate</u> | <u>Type</u> |          | <u>Use Frequency</u> |          |          | <u>Training Needed</u> |          |          |
|----------------------------------------------------------------------------------------|--------------------------|-------------|----------|----------------------|----------|----------|------------------------|----------|----------|
|                                                                                        |                          | <u>S</u>    | <u>U</u> | <u>D</u>             | <u>W</u> | <u>M</u> | <u>I</u>               | <u>D</u> | <u>E</u> |
| 713. Check invoices against purchase orders.                                           | 43                       | 67          | 33       | 25                   | 25       | 50       | 13                     | 13       | 74       |
| 714. Organize storage areas for equipment, supplies, drugs.                            | 50                       | 75          | 25       | 75                   | 0        | 25       | 50                     | 0        | 50       |
| 719. Follow procedures for control and security of medical supplies, drugs, equipment. | 24                       | 80          | 20       | 100                  | 0        | 0        | 75                     | 0        | 25       |